

Before the
NATIONAL TELECOMMUNICATIONS & INFORMATION ADMINISTRATION
AND THE
RURAL UTILITIES SERVICE
Washington, D.C.

Joint Request for Information)
To: NTIA & RUS)

Docket No. 0907141137-91375-05
RIN: 0660-ZA28; RIN: 0572-ZA01

COMMENTS OF THE UNIVERSITY OF ARKANSAS
FOR MEDICAL SCIENCES

Respectfully submitted,

THE UNIVERSITY OF ARKANSAS
FOR MEDICAL SCIENCES

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EXECUTIVE SUMMARY

The Round 2 NOFA must specifically address Middle Mile Comprehensive Community Anchor Projects (“Middle Mile CCAPs”) as a separate funding category. A Middle Mile Comprehensive Community Anchor Project should be defined as: “A broadband infrastructure project that is comprised of point-to-point middle mile facilities exclusively between community anchor institutions.”

The Round 2 application processes and criteria should be modified to better address the characteristics and functions of Middle Mile CCAPs. Specifically, Middle Mile CCAP applicants should be required to report only those census blocks for the project’s interconnection points (“interconnection point census blocks”), i.e., the census blocks which contain the physical locations of the community anchor institutions themselves. However, Middle Mile CCAP applicants should not be required to report other census blocks, including those through which the spans pass (“traversed census blocks”) or other census blocks in the service area of the project (“other service area census blocks”). For many Middle Mile CCAP projects, the fact is that (i) the spans for such projects provide dedicated point-to-point connectivity between end points, without direct interconnection or connectivity to entities or consumers in the traversed census blocks or other service area census blocks; and (ii) the demographics of the traversed census blocks and other service area census blocks are likely to be addressed in any event by Middle Mile CCAP applicants as part of their “last mile service area” reporting obligations. Therefore, allowing Middle Mile CCAP applicants to exclude traversed census blocks and other service area census blocks should not in any way affect the public interest analyses for such applications.

In addition, for purposes of analyzing project overlap, only the interconnection point census blocks of other Middle Mile CCAP projects serving the same type of community anchors should be analyzed

Further, for Round 2, the community/other area and last mile service area reporting requirements should be substantially streamlined for wide-area Middle Mile CCAP applications. Such streamlining should include: (i) the option of identifying middle mile spans in a text exhibit or other uploaded file (“exhibit”), rather than on the application form; (ii) use of the exhibit to list spans, last mile service areas and communities/other areas; and (iii) use of the exhibit to report *cumulative* demographic data for communities/other areas and last mile service areas. In addition, for identifying and/or mapping the unserved, underserved and rural nature of proposed funded service areas and communities/other areas, Round 2 Middle Mile CCAP applicants should be allowed to incorporate by reference the relevant portions of existing mapping resources of NTIA and RUS, as well as NTIA-approved mapping grantees.

Finally, full (100%) grants should be made available to all Round 2 Middle Mile CCAP applicants, a policy which is particularly compelling for wide-area projects in states with high poverty rates.

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The University of Arkansas for Medical Sciences (“UAMS”), by undersigned counsel, hereby submits these comments to the National Telecommunications & Information Administration (“NTIA”) and the Rural Utilities Service (“RUS”) pursuant to a joint request for information¹ relating to the agencies’ implementation of a second round of funding (“Round 2”) for the Broadband Initiatives Program (BIP) and the Broadband Technology Opportunities Program (BTOP), as part of the American Recovery & Reinvestment Act.²

- I. The Round 2 NOFA Must Specifically Address Funding and Application Processes for “Middle Mile Comprehensive Community Anchor Projects” (RFI – Section II(A)(1))**
- A. As a General Matter, Community Anchor Funding Requirements and Application Processes Were Not Satisfactorily Addressed in Round 1**

For the first round of funding under BTOP and BIP (“Round 1”), it was clear that the funding categories/definitions and the application processes were primarily designed to address the provision of broadband service to end-user consumers in households, rather than service to and between community anchor institutions. Indeed, the Round 1

¹ Joint Request for Information, 74 Fed. Reg. 58940 (November 16, 2009) (“RFI”).

² Pub. L. 111-5, 123 Stat. 115 (2009) (“ARRA”).

definitions of “Last Mile” and “Middle Mile” did not expressly include projects that exclusively interconnect community anchor institutions, with the issue informally addressed only in subsequent clarifying workshop materials and FAQs. In addition, as discussed in more detail herein, the Round 1 application processes were not structured in a convenient or relevant manner for such community anchor projects.

B. ARRA Policy Requires Greater Support and Funding for Community Anchor Projects

Without question, the ARRA repeatedly stresses the importance of “ensuring” broadband access to community anchor institutions. For example, one of the express purposes of the BTOP is to provide “broadband education, awareness, training, access, equipment and support to ...[s]chools (including institutions of higher education), libraries, medical and health care providers, and other community support organizations to promote greater use of broadband by and through these organizations.”³ In addition, in the BTOP’s list of permitted uses for competitive grants, such uses expressly include “ensur[ing] access to broadband service by community anchor institutions.”⁴ Finally, in listing the basic selection criteria for applications, the ARRA provides that NTIA must consider whether “an application to deploy infrastructure will ... enhance services for health care delivery, education or children to the greatest population of users in the area.”⁵

In the RFI, both NTIA and RUS acknowledge the importance of this policy issue by confirming that “[e]nsuring that anchor institutions, such as community colleges, schools, libraries, health care facilities, and public safety organizations, have high-speed

³ BTOP, §6001(b)(3)(A).

⁴ BTOP, §6001(f)(3).

connectivity to the Internet can contribute to sustainable community growth and prosperity. Such projects also have the potential to stimulate the development of last mile services that would directly reach end users in unserved and underserved areas.”⁶

C. The Round 2 NOFA Must Specifically Address Middle Mile Comprehensive Community Anchor Projects (“Middle Mile CCAPs”) As a Separate Funding Category

In light of the above, it is clear that the failure in Round 1 to sufficiently address the funding needs and application processes for projects interconnecting exclusively to and between community anchor institutions must be remedied in Round 2.

For Round 2, UAMS respectfully submits that the Round 2 Notice of Funds Availability (“NOFA”) must specify “Middle Mile Comprehensive Community Anchor Project” (“Middle Mile CCAP”) as a separate funding category. To that end, UAMS further submits that for Round 2, a Middle Mile Comprehensive Community Anchor Project should be defined as follows:

“Middle Mile Comprehensive Community Anchor Project” means “A broadband infrastructure project that is comprised of point-to-point middle mile facilities exclusively between community anchor institutions.”⁷

As discussed below, for Round 2, the application procedures and criteria for Middle Mile CCAPs should be designed to address the unique characteristics of such projects.

⁵ BTOP, §6001(h)(2)(C).

⁶ RFI, p.5.

⁷ RFI, Section II(A)(1).

D. Round 2 Application Processes and Criteria Should Be Modified to Better Address the Characteristics and Functions of Middle Mile Comprehensive Community Anchor Projects (“Middle Mile CCAPs”)

1. Round 2 Middle Mile CCAP Applicants Should be Required to Report Only Those Census Blocks Associated With the Project’s Interconnection Points

In Round 1, middle mile applicants were required to identify every census block through which each middle mile span traversed (Round 1 Application, Item 14). As explained below, this approach is not appropriate for Middle Mile CCAP applications, and should be modified.

- a. Middle Mile CCAP applicants should be required to report only those census blocks for the project’s interconnection points (“interconnection point census blocks”), i.e., the census blocks which contain the physical locations of the community anchor institutions themselves**

The census blocks associated with a Middle Mile CCAP’s interconnection points (the “interconnection point census blocks”) are critical to determining not only the number of community anchors involved in the project, but also the location of such community anchors for project overlap purposes. Therefore, interconnection point census blocks should be reported by Middle Mile CCAP applicants in their applications.

- b. However, Middle Mile CCAP applicants should not be required to report other census blocks, including those through which the spans pass (“traversed census blocks”) or other census blocks in the service area of the project (“other service area census blocks”)**

Many Middle Mile CCAPs are likely to involve numerous (sometimes hundreds) of interconnection points and spans which, cumulatively, traverse hundreds of census blocks (“traversed census blocks”) throughout many counties or regions. Similarly, the service areas of these Middle Mile CCAPs can include many other census blocks in the

service area – e.g., other than the interconnection point census blocks and traversed census blocks -where cities and communities benefiting from the project are located (“other service area census blocks”). Thus, due to the sheer numbers of sites and the scope of many Middle Mile CCAP applications, the existing census block reporting burden for these larger scope projects is inherently onerous and should be removed. Further, for many Middle Mile CCAP projects, the fact is that (i) the spans for such projects provide dedicated point-to-point connectivity between end points, without direct interconnection or connectivity to entities or consumers in the traversed census blocks or other service area census blocks; and (ii) the demographics of the traversed census blocks and other service area census blocks are likely to be addressed in any event by Middle Mile CCAP applicants as part of their “last mile service area” reporting obligations. Therefore, allowing Middle Mile CCAP applicants to exclude traversed census blocks and other service area census blocks from their responses to Question 14(b) should not in any way affect the public interest analyses for such applications.

c. For purposes of analyzing project overlap, only the interconnection point census blocks of other Middle Mile CCAP projects serving the same type of community anchors should be analyzed

To the extent that project overlap can result in rejection or de-prioritizing of proposals under the ARRA statute or NOFA-specific procedures, care must be taken to ensure that Middle Mile CCAP applications are not unduly penalized by erroneously including traversed census blocks or other service area census blocks in the overlap analysis. For Round 2, if traversed census blocks or other service area census blocks are used to determine whether Middle Mile CCAP applications overlap with other applications or funded projects, then a disproportionate and misleading percentage of

Middle Mile CCAP applications will be found to overlap, leading to an increased risk of rejection or-deprioritization for too many of these critical proposals. This risk is particularly acute for Middle Mile CCAP applications proposing funding over wide areas, including state-wide or regional projects.

In addition, with respect to project overlap, UAMS submits that overlap of a Middle Mile CCAP application should be considered only if the overlap exists with respect to another Middle Mile CCAP application or project involving service to the same type of community anchor (e.g., where the overlapping project areas both involve connectivity to hospitals, or both involve connectivity to libraries). Thus, if a Middle Mile CCAP project area involving connectivity to health care providers overlaps with another Middle Mile CCAP project involving connectivity to schools, libraries or public safety, the overlap should not result in the rejection or de-prioritization of either project. Similarly, if a Middle Mile CCAP project area overlaps with a project involving residential Internet connectivity, then the overlap should not result in the rejection or de-prioritization of either project.

2. For Round 2, the Community and Last Mile Service Area Reporting Requirements Should be Substantially Streamlined for Wide-Area Middle Mile CCAP Applications

For Round 1, all middle mile applicants were required to provide demographic data (square miles, population, households, businesses, anchor institutions, etc.) for every “community” or “other area”, in every last mile service area, and for every proposed funded service area (Round 1 Application, Item 14). While this approach may have been reasonable for middle mile projects comprised of only one or two proposed funded service areas covering relatively small geographic areas, the community and last mile

reporting requirements for wide-area Middle Mile CCAP applications with numerous proposed funded service areas/spans are tremendously onerous. For example, in Round 1, for a Middle Mile Comprehensive Community Anchor Project where (i) 100 spans/proposed funded service areas are specified; and (ii) each span serves 2 last mile service areas; and (iii) each last mile service area contains 5 communities/other areas, the applicant would have been required to submit hundreds of separate pages of demographic information for Question 14!

Accordingly, for Round 2, the community and last mile service area reporting requirements should be substantially streamlined for wide-area Middle Mile CCAP applications. Wide-area Middle Mile CCAP applications subject to these streamlined procedures could be characterized as, for example, applications proposing 50 or more spans, or applications with interconnection points located in at least 50% of the counties in a given state.

For Round 2 wide-area Middle Mile CCAP applications, the following streamlined procedures should apply:

a. Option to use an exhibit

Wide-area Middle Mile CCAP applicants should be allowed the option of identifying their middle mile spans in a text exhibit or other uploaded file (“exhibit”), rather than on the application form. Similarly, wide-area Middle Mile CCAP applicants should be allowed use that exhibit to provide cumulative demographic data for the relevant communities/other areas and associated last mile service areas.

b. Use of exhibit to list spans, last mile service areas and communities/other areas

Wide-area Middle Mile CCAP applicants should be allowed to use the exhibit to identify and list the following information:

- The name of each span.
- The associated last mile service area(s) with respect to each span.
- For each last mile service area, the communities/other areas.

c. Use of exhibit to report cumulative demographic data for communities/other areas and last mile service areas

Wide-area Middle Mile CCAP applicants should be allowed to use the exhibit to identify, on a *cumulative* basis, the following demographic information:

- *Cumulative square miles for all the specified communities/other areas.*
- *Cumulative demographic figures (population, households, businesses, critical community facilities, community anchors and public safety entities) for all specified last mile service areas.*

3. For Identifying and/or Mapping the Unserved, Underserved and Rural Nature of Proposed Funded Service Areas and Communities/Other Areas, Round 2 Middle Mile CCAP Applicants Should Be Allowed to Incorporate by Reference the Relevant Portions of Existing Mapping Resources of NTIA and RUS, As Well As NTIA-Approved Mapping Grantees

In Round 1, applicants were required to create detailed maps specifying the unserved, underserved and rural areas in their proposed funded service areas, and middle mile applicants were also required to specify in such maps the “area that will benefit” from the project (Round 1 Application, Question 12). In addition, for Round 1, applicants were required to specify the unserved, underserved or rural nature of the communities/other areas in each last mile service area (Round 1 Application, Question 14). While these procedures may be appropriate for middle mile applicants with fewer

spans or smaller last mile service areas, the process is completely unsuitable for many Middle Mile CCAP applicants. As explained above, many wide-area Middle Mile CCAP applications are likely to involve numerous (sometimes hundreds) of interconnection points and spans which, cumulatively, traverse hundreds of census blocks throughout many counties or regions, and which can “benefit” entire regions and states. Thus, the tasks of listing the unserved, underserved or rural nature of every last mile community/other area and manually mapping these wide-area networks using the agency-provided software is nothing short of herculean, and NTIA and RUS should take all reasonable steps to help ease the burden for Middle Mile CCAP applicants.

Specifically, for Round 2, NTIA and RUS should identify existing mapping resources which can be incorporated by reference by a Middle Mile CCAP applicant to assist the applicant in depicting its map(s) for Question 12, and for identifying the unserved, underserved or rural nature of every last mile community/other area for Question 14. Incorporating by reference the relevant portions of such approved mapping would relieve a Middle Mile CCAP applicant from having to unnecessarily re-create that mapping on its own, and also relieve the applicant from unnecessary and onerous data entry with respect to specifying the unserved/underserved/rural nature of potentially hundreds of communities/other areas. At a minimum, NTIA and RUS should allow Middle Mile CCAP applicants to incorporate by reference the relevant portions of existing unserved/underserved/rural maps that have been created by grantees under the NTIA’s State Broadband Data and Development Grant Program. By way of example, Middle Mile CCAP applicants for project areas in Arkansas should be able to incorporate by reference the relevant portions of the existing “Underserved Census

Blocks in Arkansas” and “Unserved Census Blocks in Arkansas” maps that have been created by Connect Arkansas,⁸ the NTIA grantee for Arkansas under NTIA’s State Broadband Data and Development Grant Program.

In addition, Middle Mile CCAP applicants should be permitted to incorporate by reference the relevant portions of existing maps provided by RUS or NTIA that specify areas as “rural” or “BIP-eligible”.

II. Full (100%) Grants Should Be Made Available to All Round 2 Middle Mile CCAP Applicants, A Policy Which Is Particularly Compelling for Wide-Area Projects in States with High Poverty Rates (RFI – Section I(A)(4))

By their very nature, Middle Mile CCAP projects involve the networking of numerous city and state government anchor institutions that were extremely hard-hit by the recent economic downturn, and these community anchor institutions continue to suffer greatly. Indeed, recent reports show that at least 35 states have identified budget shortfalls for FY2010, resulting in budget cuts not only with respect to service to residents but also – and just as critically – cuts in state health and education services.⁹ The financial woes of state and local government anchor institutions, of course, mirror the financial troubles faced by low-income populations across the country. With this harsh reality existing as a backdrop to the implementation of the ARRA, asking Middle Mile CCAP networks and institutions to pay off multi-million dollar loans is counter-intuitive at best and is, at worst, contrary to the statutory goals and principals of the

⁸ See http://www.connect-arkansas.org/mapping_and_research/broadband_maps/broadband_availability_maps.

⁹ Elizabeth McNichol and Nicholas Johnson, “Recession Continues to Batter State Budgets; State Responses Could Slow Recovery”, Center on Budget and Policy Priorities, accessed at: <http://www.cbpp.org/cms/?fa=view&id=711>.

statute itself. Notwithstanding these facts, for Round 1 RUS made full (100%) grants available only to projects proposing to exclusively serve remote, unserved, rural areas.

Accordingly, for Round 2, either (i) RUS should expand the situations under which broadband infrastructure applicants can obtain full (100%) grants, to include Middle Mile CCAP proposals; or (ii) Middle Mile CCAP applicants should be allowed to apply for grants exclusively under BTOP, regardless of the level of rurality for such projects. In this regard, it should be noted that making full (100%) grants available to Middle Mile CCAP applicants is a particularly compelling policy with respect to projects located in states with high poverty rates,¹⁰ as broadband deployment and utilization is significantly less for low income populations.¹¹

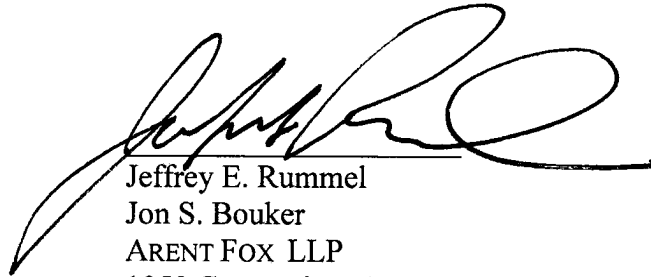
¹⁰ See Attachment 1 - “Percent of People Below Poverty Level in the Past 12 Months (For Whom Poverty Status is Determined)”, 2008 American Community Survey 1-Year Estimates, States and Puerto Rico, U.S. Census Bureau.

¹¹ See, e.g., News Release, “FCC Identifies Critical Gaps in Path to Future Universal Broadband”, p.2 (rel. November 18, 2009) (“Nearly 90 percent of families with incomes of \$100,000 or more subscribe to broadband services, compared to 35 percent with incomes of \$20,000 or less.”)

III. Conclusion

For the foregoing reasons, UAMS respectfully submits that Round 2 rules implementing the BTOP and BIP should be adopted consistent with these Comments.

Respectfully submitted,

A handwritten signature in black ink, appearing to read 'Jeffrey E. Rummel', is written over a horizontal line.

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Attachment 1

**“Percent of People Below Poverty Level in the Past 12 Months
(For Whom Poverty Status is Determined)”**

**2008 American Community Survey 1-Year Estimates
States and Puerto Rico
U.S. Census Bureau**

U.S. Census Bureau

American FactFinder



United States -- States; and Puerto Rico

GCT1701. Percent of People Below Poverty Level in the Past 12 Months (For Whom Poverty Status is Determined)

Universe: Population for whom poverty status is determined

Data Set: 2008 American Community Survey 1-Year Estimates

Survey: American Community Survey, Puerto Rico Community Survey

NOTE. For information on confidentiality protection, sampling error, nonsampling error, and definitions, see Survey Methodology.

Geographic area	Percent	Margin of Error
United States	13.2	+/-0.1
Alabama	15.7	+/-0.5
Alaska	8.4	+/-0.8
Arizona	14.7	+/-0.4
Arkansas	17.3	+/-0.7
California	13.3	+/-0.2
Colorado	11.4	+/-0.5
Connecticut	9.3	+/-0.4
Delaware	10.0	+/-0.8
District of Columbia	17.2	+/-1.3
Florida	13.2	+/-0.2
Georgia	14.7	+/-0.3
Hawaii	9.1	+/-0.7
Idaho	12.6	+/-0.9
Illinois	12.2	+/-0.2
Indiana	13.1	+/-0.4
Iowa	11.5	+/-0.5
Kansas	11.3	+/-0.5
Kentucky	17.3	+/-0.5
Louisiana	17.3	+/-0.6
Maine	12.3	+/-0.6
Maryland	8.1	+/-0.3
Massachusetts	10.0	+/-0.3
Michigan	14.4	+/-0.3
Minnesota	9.6	+/-0.3
Mississippi	21.2	+/-0.9
Missouri	13.4	+/-0.3
Montana	14.8	+/-0.9
Nebraska	10.8	+/-0.5
Nevada	11.3	+/-0.6
New Hampshire	7.6	+/-0.6
New Jersey	8.7	+/-0.3
New Mexico	17.1	+/-0.7
New York	13.6	+/-0.2
North Carolina	14.6	+/-0.4
North Dakota	12.0	+/-0.9
Ohio	13.4	+/-0.3
Oklahoma	15.9	+/-0.5
Oregon	13.6	+/-0.5
Pennsylvania	12.1	+/-0.2
Rhode Island	11.7	+/-0.8

Geographic area	Percent	Margin of Error
South Carolina	15.7	+/-0.5
South Dakota	12.5	+/-0.9
Tennessee	15.5	+/-0.4
Texas	15.8	+/-0.2
Utah	9.6	+/-0.5
Vermont	10.6	+/-0.9
Virginia	10.2	+/-0.3
Washington	11.3	+/-0.3
West Virginia	17.0	+/-0.7
Wisconsin	10.4	+/-0.3
Wyoming	9.4	+/-0.9
Puerto Rico	44.8	+/-0.7

Source: U.S. Census Bureau, 2008 American Community Survey

Data are based on a sample and are subject to sampling variability. The degree of uncertainty for an estimate arising from sampling variability is represented through the use of a margin of error. The value shown here is the 90 percent margin of error. The margin of error can be interpreted roughly as providing a 90 percent probability that the interval defined by the estimate minus the margin of error and the estimate plus the margin of error (the lower and upper confidence bounds) contains the true value. In addition to sampling variability, the ACS estimates are subject to nonsampling error (for a discussion of nonsampling variability, see Accuracy of the Data). The effect of nonsampling error is not represented in these tables.

Notes:

While the 2008 American Community Survey (ACS) data generally reflect the November 2007 Office of Management and Budget (OMB) definitions of metropolitan and micropolitan statistical areas; in certain instances the names, codes, and boundaries of the principal cities shown in ACS tables may differ from the OMB definitions due to differences in the effective dates of the geographic entities. The 2008 Puerto Rico Community Survey (PRCS) data generally reflect the November 2007 Office of Management and Budget (OMB) definitions of metropolitan and micropolitan statistical areas; in certain instances the names, codes, and boundaries of the principal cities shown in PRCS tables may differ from the OMB definitions due to differences in the effective dates of the geographic entities.

Estimates of urban and rural population, housing units, and characteristics reflect boundaries of urban areas defined based on Census 2000 data. Boundaries for urban areas have not been updated since Census 2000. As a result, data for urban and rural areas from the ACS do not necessarily reflect the results of ongoing urbanization.

Explanation of Symbols:

1. An '***' entry in the margin of error column indicates that either no sample observations or too few sample observations were available to compute a standard error and thus the margin of error. A statistical test is not appropriate.
2. An '-' entry in the estimate column indicates that either no sample observations or too few sample observations were available to compute an estimate, or a ratio of medians cannot be calculated because one or both of the median estimates falls in the lowest interval or upper interval of an open-ended distribution.
3. An '-' following a median estimate means the median falls in the lowest interval of an open-ended distribution.
4. An '+' following a median estimate means the median falls in the upper interval of an open-ended distribution.
5. An '***' entry in the margin of error column indicates that the median falls in the lowest interval or upper interval of an open-ended distribution. A statistical test is not appropriate.
6. An '*****' entry in the margin of error column indicates that the estimate is controlled. A statistical test for sampling variability is not appropriate.
7. An 'N' entry in the estimate and margin of error columns indicates that data for this geographic area cannot be displayed because the number of sample cases is too small.
8. An '(X)' means that the estimate is not applicable or not available.